

PROPOSAL PAPER

Independent Technical Panel on Demand Management Measures Final Report on California Landscape Water Use *12-11-15 Draft*

Section 7 – Complementary Policies and Regulations

Recommendation #4: Recognition of Landscape Efficiency in Connection Charges

Authoring Team: Ed Osann

Background: In the single-family residential sector, landscape water use is a major factor in the capacity required to provide water service to a new home. In turn, landscape water use drives the peak season demand for nearly all urban water suppliers in California. The 2015 revisions to MWELo reduce ETAF by over 20%, which should have the effect of reducing the requirements for capacity to serve new MWELo-compliant homes. Landscapes installed and maintained to better-than-MWELo standards should provide even greater savings.

Most public water suppliers have a set of one-time charges for a new dwelling to connect to the public water system. Some small portion of these charges may relate to the cost of a meter, a short service lateral, and costs associated with adding a new customer account. The great majority of these charges, however, are for the recovery of the costs of water system capacity – capital costs associated with supply, transmission, treatment, and distribution of water – that are assigned to new connections as a matter of equity with existing customers. These one-time charges for system capacity are separate from the recurring charges for water service. Any differentiation in these charges is typically based upon meter size categories, with connections requiring larger meters facing a higher charge.

In California, connection charges range from modest to quite high.¹ The average water connection charge for single-family homes reported in the 2013 survey by the Cal-Nevada Section of AWWA was \$3,656, while the highest was \$28,600. The forthcoming 2015 survey is likely to show even higher figures.

The Panel received a presentation at its April 2014 meeting by Western Resource Advocates² on a forthcoming report (subsequently released) on the role that water connection charges can play in encouraging water efficiency in new growth.³ Based on an examination of four case studies, the report found that meter size alone is an imprecise predictor of the capacity requirements imposed on the system, when dwellings served by comparable meters can have substantially different peak season

¹ One exception: Investor-owned water companies that are regulated by the California Public Utilities Commission are not authorized to assess connection charges.

² http://www.water.ca.gov/calendar/materials/incentivizing_water_conservation_with_connection_fees_nuding_18966.pdf

³ A. Nuding, S. Leurig, J. Hughes, *Water Connection Charges: A Tool for Encouraging Water-Efficient Growth*, Western Resource Advocates, University Of North Carolina Environmental Finance Center, and Ceres. August 2015. Available for download at <<https://www.ceres.org/resources/reports/water-connection-charges-a-tool-for-encouraging-water-efficient-growth/view>>.

water demand profiles. Case studies found strong interest by homebuilders in bringing to market new homes that qualify for lower connection charges based on locally determined water efficiency criteria.

The report recommends that –

- Utilities should consider refined, multi-factor connection charges to encourage water efficiency of new developments and capture the true costs of new development.
- Utilities should consider putting in place mechanisms to ensure longevity of water savings.
- Utilities should invite customers and developers into the connection charge design process.
- Local policymakers and planners should recognize the importance of connection fees in shaping future water demand and development patterns, and in managing costs of this fundamental service.

In essence, connection charges that are differentiated based on the construction of new homes and landscapes that effectively shrink the capacity footprint of a new customer represent ***an alignment of interests between the homebuilder, the water supplier, and the new occupants***. When new homes and landscapes are built to standards that ensure lower peak demand than business-as-usual construction, real savings are created and an opportunity exists for ***shared savings*** among all stakeholders.

In California, MWELO 2015 and the incorporation of landscape standards into the mandatory portion of the CalGreen state building code signify a potential sea change in outdoor water use in new development. The benefit of this change can be readily monetized if water suppliers with connection charges take these new regulations into account when connection charges are next reviewed. MWELO 2015 lowers the ETAF for new residential landscapes from 0.7 to 0.55, a reduction of 21%. So the standards are more stringent and the enforcement of these standards should improve. DWR should assist water suppliers in evaluating the impact of MWELO on peak demand and system capacity, and water suppliers should take this into account when setting or revising their connection charges.

Additionally, water suppliers should be encouraged through state financial assistance to consider landscape design or performance standards of their own devising that would define a *better-than-code* landscape that would be sufficiently *more* water-conserving that it would allow for a specific reduction in the connection charge that applies to all code-minimum connections. This would be designed by the water supplier, and would have to be durable enough to give the agency confidence that a lower connection charge is warranted. Each water supplier with above average connection charges should have sufficient “headroom” to offer a significant enough discount ($\geq \$1,000$) to draw the attention and participation of homebuilders.

Recommendation Purpose Statement: Connection charges that are based on a reasonably predictable reduction in peak demand of new buildings and landscapes are a new concept in California, but represent a strategy with great potential to achieve further reductions in water use. The purpose of this proposal is to secure assistance to local water suppliers to 1) account for the demand-reducing effects of 2015 MWELO and CalGreen revisions in their upcoming revisions to connection charges for new customers; and, 2) explore the development of better-than-code landscape criteria that would support a differentiated connection charge for eligible new homes.

Recommendations:

1. The Department of Water Resources should develop guidance for use by local water suppliers to inform local decisions regarding connection charges. Specifically, the Department should develop and test one or more methods for relating improvements in the water efficiency of new landscapes required by MWELO 2015 with the peak demand and system capacity requirements of new buildings and landscapes connecting to a water system. The department should further compile information on mechanisms available to water suppliers and other local agencies to ensure the durability of water savings attributed to new landscapes and mechanisms for potentially recapturing capacity charges where water use subsequently exceeds originally projected use.
2. The Department of Water Resources should develop a grant solicitation specifically to fund innovation in differentiated connection charges. Specifically, grant funds should be made available to cover a portion of the discount from standard connection charges that are offered to new homes and landscapes meeting locally-developed better-than-code criteria for water efficiency.
3. Upon the availability of guidance published by the Department of Water Resources for this purpose, each water supplier with connection charges should review its existing schedules and underlying assumptions to take into account the efficiencies to be achieved by full implementation of 2015 MWELO within its service area.